



US Army Corps
of Engineers®

Engineer Update

See more articles and photos at
www.hq.usace.army.mil/cepa/pubs/update.htm

Vol. 31 • No. 7 • July 2007

Corps releases New Orleans risk assessment

"I've had this job for 18 months now, and this may be the most important day since I've been on the job."

Donald Powell, chairman of the Gulf Coast Recovery (GCR) Office, highlighted the significance of the U.S. Army Corps of Engineers' release of the prototype draft risk assessment model results for the hurricane protection system in the Greater New Orleans vicinity with that statement on June 20. Powell's comment was made as part of his opening remarks at the New Orleans press conference conducted to announce the release of the assessment.

The release of the draft risk assessment marks the first time a model has enabled an analysis of an entire hurricane protection system. The assessment provides supercomputer modeled information about the vulnerability of the Greater New Orleans-area system as it existed both pre-Hurricane Katrina and on June 1, the start of hurricane season 2007.

The draft risk products enable officials and the public to make better risk-informed decisions about where and how to rebuild as the region moves forward in its recovery from the devastating impacts of Hurricane Katrina on Aug. 29, 2005.

Lt. Gen. Robert L. Van Antwerp, 52nd Chief of Engineers, said, "We've conducted this world-class study so people will understand their risk. We intend to communicate transparently, tell the public what we know, when we know it."

Lt. Gen. Carl Strock, then the 51st Chief of Engineers, commissioned the independent Interagency Performance Evaluation Task Force (IPET) after Hurricane Katrina to study the performance of the hurricane protection system during the storm. IPET developed the risk analysis as part of their mission.

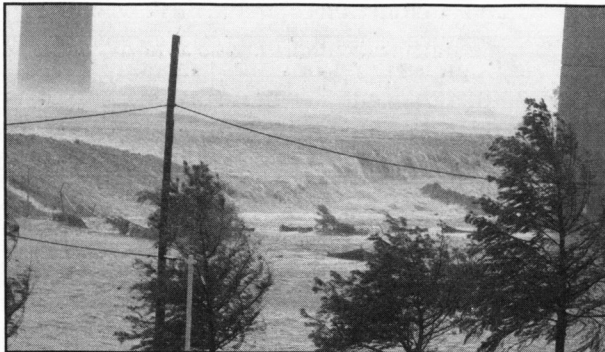
The released draft risk products show how post-Katrina repairs and improvements to the protection system have reduced pre-Katrina risk and vulnerability in most areas.

The publicly released products are the result of a concerted effort by USACE, GCR, the Office of the Assistant Secretary of the Army (Civil Works), and other agencies to ensure the highly technical IPET risk information is translated into easily understood, useful information for the public.

Lt. Col. David Berczek, USACE program manager for New Orleans risk and reliability, said, "We have a highly technical assessment that we wanted to make understandable and useful for the general public. So we presented it to small community groups and asked for their feedback."

In the weeks leading to the official public release, USACE met with numerous small groups to present the draft risk assessment and to solicit comments on how to make the information useful for the public.

These sessions included the office of the Mayor of New Orleans, city government, and local parish presidents and councils; the New Orleans Business Council; the Louisiana Recovery Authority; local colleges and universities; insurers and realtors; and many local community and neighborhood organizations. The groups' input was essential to the success of the final products.



The draft risk assessment model will allow residents of New Orleans to estimate the risk of where they live before storms like Hurricane Katrina strike. (Photo by Don McClosky, Entergy Michoud Power Plant)

The public can now go to the Internet (<http://NOLArisk.usace.army.mil>) to view and download annualized flood risk information for specific locations around Greater New Orleans based on the hurricane protection system's status as of June 1. Flood depth information on the maps can provide the public, businesses and community leaders with critically needed information for decisions about where and how to build, and what mitigation measures to adopt.

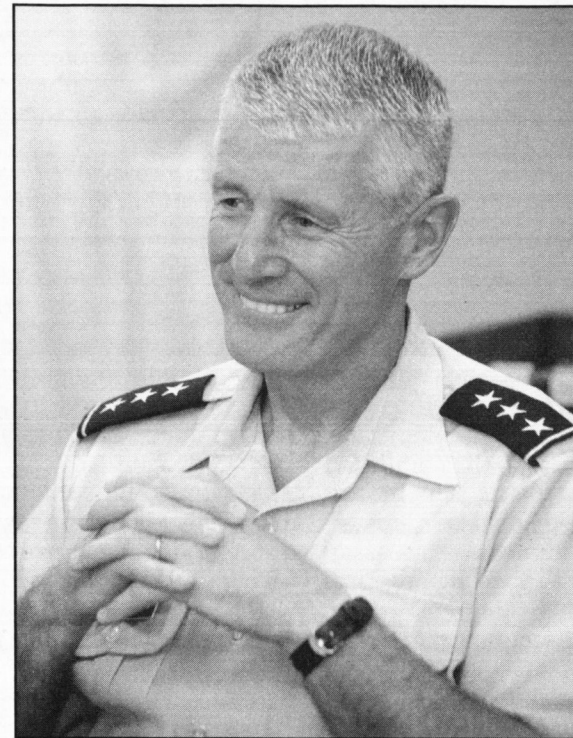
Risk products are updated from pre-Katrina conditions to show improvements already made to the system's 350 miles of levees, temporary gates, pumps, and other improvements. These prototype risk products required the development of an entirely new hurricane modeling method. IPET worked with USACE, the Federal Emergency Management Agency, the National Oceanographic and Atmospheric Administration, universities, and private industry to develop the model.

The IPET risk analysis employs physics, mathematics, engineering, hydrological, geological, and meteorological knowledge. It incorporates three main factors when determining risk — hazard (probability of hurricanes, their surge and waves), the protection system (performance of levees, floodwalls, and other structures), and consequences (loss of life or property).

Dr. Lewis Link, IPET director, noted that while past models were based on actual storms, this model incorporates both historic and possible future storms. The IPET fed 152 actual and hypothetical storms of varying severity that might hit the Louisiana coast into the model. The storms ranged from 50-year storms (two percent annual chance of occurring) to 5,000-year storms (.02 percent annual chance of occurring). Hurricane Katrina is considered a 400-year storm for the Louisiana coast.

The hurricane modeling provides critical water levels (storm surge and waves) for future storm. These water levels are applied to New Orleans' 350-mile hurricane protection system to determine reliability factors.

More than 135 reaches of floodwalls and levees, representative of uniform areas of the system, and



Lt. Gen. Robert L. Van Antwerp is the 52nd Chief of Engineers. (Photo by F.T. Eyre, HECSA)

'I have a good first impression of the Corps.'

"This is a time in the history of the U.S. Army Corps of Engineers that's unprecedented in our workload and our opportunity," said Lt. Gen. Robert L. Van Antwerp, the 52nd Chief of Engineers. "It's a time when we'll have to deliver, because I think we have an issue with trust. But I think we can build back that trust, and we will. We'll build it back by executing and delivering. In the most basic terms, say what you're going to do, and do what you say."

Van Antwerp, who took command on May 18, has already been busy (trips to Louisiana, the Florida Everglades, and Iraq are just part of the demanding schedule he has set for himself), and he has some definite ideas about what he wants the Corps to accomplish in the next four years.

"In general terms, we want to be the world's

Continued on page two

Continued on page four

Insights

Fourth Warrior Ethic binds all of us together

Col. Sherrill Munn
Chaplain, U.S. Army Corps of Engineers

(This is the last in a series of articles about the Warrior Ethos.)

This month we conclude our series on the Warrior Ethos, those guiding standards found in these four statements:

I will always place the mission first.

I will never accept defeat.

I will never quit.

I will never leave a fallen comrade.

I will focus on the fourth and final principle, "**I will never leave a fallen comrade.**"

This statement has to do with that special esprit de corps that binds Soldiers together into an effective team. The first principle set priorities and focused us on what is essential. The second is about doing what is necessary to accomplish the mission. The third one has to do with a dauntless spirit.

This final principle expresses that deep relationship that develops between Soldiers when their lives depend on one another and they face sometimes incredible hardships with each other. It expresses a trust that no matter what happens, their fellow Soldiers will take care of them and their loved ones.

The story of David and Jonathan in I Samuel chapter 17 through II Samuel chapter 1 illustrates the special bond that warriors forge in combat. David, as a leader in King Saul's army, fought many battles alongside Jonathan, King Saul's son. They developed an unbreakable relationship described in the Bible, "They loved each other as themselves."

They pledged loyalty to each other and promised there would always be peace between their offspring. They kept this bond and fulfilled their pledges.

When King Saul became jealous of David and sought to kill him, Jonathan told David of Saul's treachery and helped him to escape Saul's trap to kill him.

And when David heard that Jonathan and King Saul had fallen in battle against the Philistines, he and his men tore their clothes in mourning. David wrote a lament to Saul and Jonathan and had all the men of Judah learn it.

He inquired about the disposition of the bodies of Saul and Jonathan. When he learned that brave men from the city of Jabesh Gilead had risked their lives to recover the bodies and properly bury them, he sent a messenger to Jabesh Gilead commending them on their faithfulness and kindness. David looked after his "battle-buddy" Jonathan even after Jonathan's death in combat.

This moral principle to never leave a fallen comrade is essential to build the trust and confidence among Soldiers that result in strong, effective teams. It reflects an inner spirit of faithfulness toward one another through which we know we can depend upon each other no matter what happens.

When we know that we can trust and depend upon each other to care for us and our families even in the most tragic situations in life, our relationships move to a higher plain. We give of ourselves more openly and completely to the organization and its mission. We work together more closely and effectively.

I see this principle lived out in the Corps of Engineers many times and in many ways. I have been involved in a number of occasions when we have lost an employee, or an employee has lost a family member. I have seen the care and support that the command, the colleagues and friends have given to their fellow employees and family members.

I have been called upon to respond and assist in these tragic circumstances, but always as part of a team of caregivers because you, the people of the Corps of Engineers, live out this principle of "Never leave a fallen comrade," even if you did not understand it in those terms.

Whenever we see a colleague in difficulty, whether from a death, serious illness, traumatic stress, anxieties, whatever the issue, we should stand ready to assist our comrade however we can. There are many ways to "fall," and we should never leave a fallen comrade, whatever the cause.

The great book and movie *Flags of Our Fathers* about the World War II battle of Iwo Jima is the story of those Marines who raised the flags on Mt. Suribachi. In that book and movie, the author makes the point that those Marines did not give their lives in incredible acts of bravery for patriotism, for country, or for a great cause. They gave their lives for each other.

Jesus expressed this spiritual bond similarly, when he said, "Greater love has no one than this, that he lay down his life for his friend" (John 15:13). Such a spirit of love creates trust and commitment to each other's well-being and brings about teams and organizations capable of magnificent feats.

Risk assessment

Continued from page one

350 specific structures (gates, transition points, pump stations and other features) are profiled in the protection system model. Information on elevation, design, construction, maintenance, soil foundations, soil erosion, and other factors are incorporated into the structural data to determine the overtopping, overtopping and erosion breaching, foundation failure, and other parameters of the protection system performance. These factors give the reliability and potential flooding aspects of the protection system.

The data was applied to pre-Katrina population and property values to determine risk for loss of life and economic losses for the entire region by natural drainage basins in the area parishes. The model assumed no population evacuation. Annualized risk for flooding (water depths) was also computed for these areas based on hurricane hazard, structural reliability, and ground elevation.

Link stated that in addition to the model's ability to show where vulnerabilities exist in the hurricane protection system, it is also used to model which potential improvements to the system will provide the greatest risk reduction and enhanced reliability.

The American Society of Civil Engineers and the National Academies' National Research Council peer review panels are performing a technical review of



Equipment, technology, systems, and processes are important to an organization. However, nothing is more important than its people and their relationship to each other. There is a reason that Jesus left the command for his disciples, "Love one another" (John 15:17). He knew that only this moral bond would get them through what they would face together. Whether you have a religious faith or not, that principle is still true and it is embodied in the words, "I will never leave a fallen comrade."

The moral principles of the warrior ethos are essential in combat. They are also essential in the battles of life. They create unassailable bonds, trust, resolve, determination, fortitude, courage, action, priorities, and commitment to accomplish the mission no matter what. They are the formula for victory in battle, in the performance of an organization, and in life. We would all do well to embrace these and live them.

I will always place the mission first.

I will never accept defeat.

I will never quit.

I will never leave a fallen comrade.

(The opinions expressed in this article are those of the writer and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of the Army, the Department of Defense, or the U.S. government.)

the risk assessment products. ASCE and the NRC have peer reviewed all other previously released IPET analyses, reports, and findings.

The next step in the risk analysis work is to model 100-year storm elevations for the New Orleans-area system. New Orleans District is using the IPET risk model to produce the 100-year risk products, planned for release later this summer.

The prototype risk model is drawing interest elsewhere in the U.S. and internationally as a tool to assist other communities understand and evaluate the potential risk and reliability of their protection systems.

Karen Durham-Aguilera, director of the Corps' Task Force Hope, noted the significance of the risk modeling for New Orleans, saying, "We're really fortunate in New Orleans. We're the only city in the country right now that has a scientific analysis that tells us what our risk is."

On-line maps of the 37 sub-basins in the New Orleans area with downloadable maps for use on Google Earth are available at <http://NOLARisk.usace.army.mil> or at <https://IPET.wes.army.mil>. An interactive map and 100-year level of protection maps will be available on the same Web sites in the coming weeks.



Bratton, 45th Chief of Engineers, dies June 2

Lt. Gen. (retired) Joseph K. Bratton, 81, the 45th Chief of Engineers, died of an aneurysm on June 2 at Virginia Hospital Center.

Bratton led the U.S. Army Corps of Engineers from October 1980 to September 1984. While he served as the Chief of Engineers, Army family housing more than doubled to its highest level since World War II, and military construction for the Army and Air Force also doubled.

Two Israeli airbases, required by the Camp David Accord, were completed six months ahead of schedule; the processing time for permits was cut in half due to implementation of simplified review procedures; and the Corps' disaster response teams were called on to help after the eruption of Mount St. Helens.

"Lt. Gen. Bratton was a patriot and a master at his craft," said Lt. Gen. Robert L. Van Antwerp, the Chief of Engineers. "A graduate of the U.S. Military Academy at West Point, he went on to serve in both Korea and Vietnam. Many of you may have worked with or for Lt. Gen. Bratton while he was with the Corps. He served as South Atlantic Division Engineer, and briefly as Deputy Chief of Engineers before being confirmed as Chief."

Bratton was born in St. Paul, Minn., and graduated third in the West Point class of 1948. He re-

ceived a master's degree in nuclear engineering from the Massachusetts Institute of Technology in 1959.

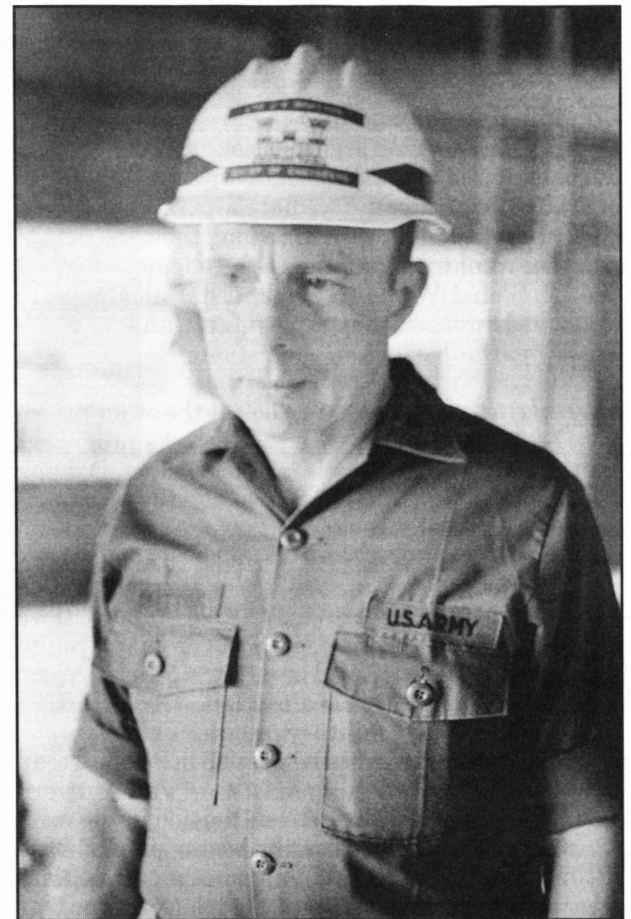
Bratton served in Austria, Korea, Germany, and Vietnam. He also worked in the Atomic Energy Commission's Reactor Development Division, and was a military assistant to the Secretary of the Army, and to the secretary of the Joint Chiefs of Staff.

He was chief of nuclear activities for Supreme Headquarters Allied Powers Europe from 1972 to 1975, and director of military applications at the Department of Energy from 1975 to 1979.

After retiring from the Army, Bratton went on to become senior vice president with the Washington office of the Pasadena-based Ralph M. Parsons Corp., an engineering and construction company. In 1995, he and his wife moved to Melbourne, Fla. He returned to Northern Virginia last year and lived in McLean, Va.

Bratton enjoyed skiing, running marathons, and playing squash.

His wife of 55 years, Louise Bratton, died in 2006. A son, John Bratton, died in 1993. Survivors include four children, Joseph Bratton Jr. of Windermere, Fla.; Mari Pierce of McLean; James Bratton of Fort Walton Beach, Fla.; Anne Verville of Arlington; a sister; 14 grandchildren; and a great-grandson.



Lt. Gen. (retired) Joseph Bratton was the 45th Chief of Engineers, serving in that position October 1980 to September 1984. (Photo by Jonas Jordan, Savannah District)

Dredged material protects historic fort

By Barry Vorse
and James Vecchitto
Jacksonville District

State and federal agencies are combining efforts and funding to protect one of the most well-preserved 19th century forts in the nation.

Fort Clinch, which was garrisoned during both the Civil and Spanish-American wars, is now located in Fort Clinch State Park. The red brick structure sits almost on the beach, where ocean currents and winds have recently sent waves lapping up against its walls.

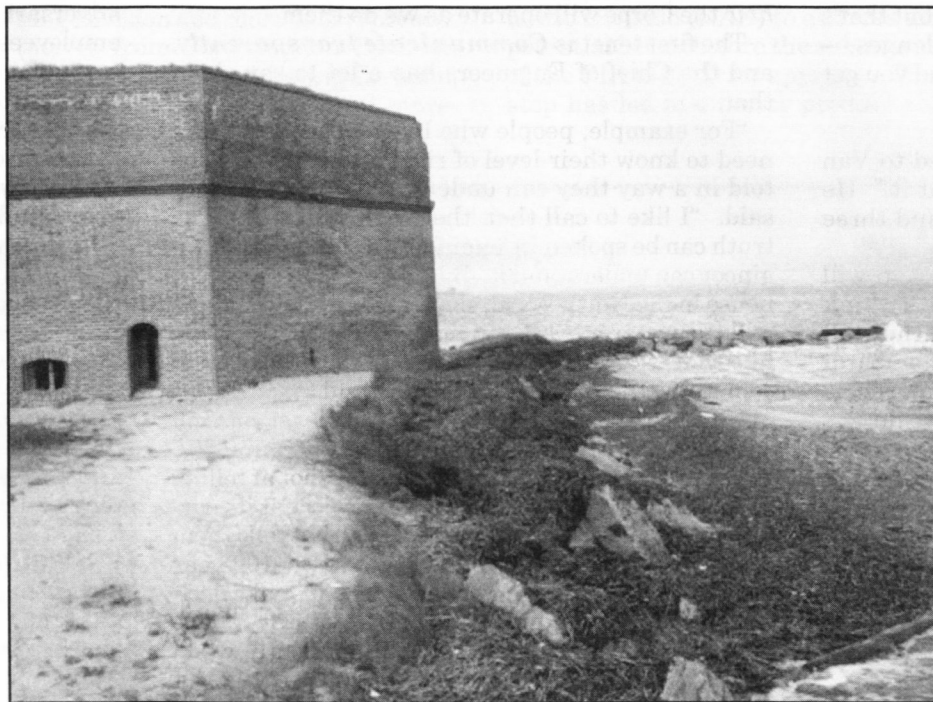
The fort and the park have been in the Florida state park system since 1935. At that time, initial restoration efforts were handled by the Civilian Conservation Corps.

Preservation. To combat the current erosion problem, the Florida Department of Environmental Protection, the U.S. Navy, and the U.S. Army Corps of Engineers pooled funds and efforts, working together to alleviate the situation.

The Corps is now placing material dredged from the nearby St. Mary's River at the base of the fort. The dredging project is maintained on an annual basis in support of Fernandina Harbor and the Kings Bay Naval Submarine Base.

To date, 44,000 cubic yards of beach-quality material from the dredging project have been placed around the historic fort.

"When the dredging effort is com-



This photo shows how close the waves come to Fort Clinch. The Corps is placing material dredged from St. Mary's River around the base of the fort. (Photos courtesy of Jacksonville District)

pleted, we hope to place about 80,000 cubic yards around the fort," said Corps project manager Steve Ross. "We've already placed materials between the groins, and this has given the structure significantly more protection."

Teamwork. "This has been a rewarding project because there are three agencies working as a team," Ross said. "We're pulling together to preserve something for generations to

come. Completing two projects at once is something we often try to do, but we're not always able to accomplish."

"This project was a great cooperation between the Florida, Jacksonville District, and the Navy," said Kings Bay Project Manager Jim More.

"The Navy takes its environmental stewardship responsibility seriously, and cooperative ventures such as the Fort Clinch beach project demonstrate how people and organizations working together can save or reuse valu-

able natural resources and protect our historical treasures," said Neil Guillebeau, Kings Bay Community Relations Manager.

The state's consultant, Eric Olsen, of Olsen Associates, agreed.

Gratitude. "I inspected the completed beach disposal project, and was pleased with the results," Olsen said. "The over-filled groin field and newly-constructed updrift feeder beach should provide the maximum amount of protection to the fort. The Corps built it exactly as asked, and I predict the effective longevity of the associated benefits will meet or exceed our expectations."

"We're grateful for the attention to detail and the Navy's continuing occupation to save sand resources," Olsen added.

Visiting Fort Clinch. Spring is one of the best times to visit Fort Clinch. In addition to the fort and a living history program, which is available every day, there are numerous other activities for the family.

The park is open from 8 a.m. until sundown 365 days a year. It is located north of Fernandina Beach, off State Road A1A, and includes a full-facility campground, and a youth camping area.

For more information, contact the Jacksonville District Corporate Communication Office by phone at 904-232-2236 or 1-800-291-9405, or by e-mail, or visit the Jacksonville District Web site.

New Chief

Continued from page one

premier engineering organization, and we want to do things world-class," Van Antwerp said. "The Chief of Staff of the Army says we have a 'persistent threat' that we'll be dealing with for a long time. So part of what we want to accomplish is the engineering part for the Global War on Terror. That means we're organized for it, we're equipped for it, and we're doing our part."

Vital missions. "As we look at the other priorities, I see an unprecedented civil works program," Van Antwerp said. "New Orleans District is doing \$5.73 billion of work. When I was the District Engineer of Los Angeles District, at its peak we did \$450 million. Then you go to Florida and look at our many major projects there, including the Everglades Restoration and the Herbert Hoover Dike Repair. If we get \$50 million a year for the Hoover Dike around Lake Okeechobee, that will be a 10-to-15-year project. Everglades Restoration is also a long-term effort."

Then there is the military programs mission.

"There's an unprecedented mission in Pacific Ocean Division with restationing in Korea," Van Antwerp said. "We've got Southwestern Division in the military construction program, the basing plan of Base Realignment and Closure. And another immediate mission is the new hospital at Fort Belvoir, Va. Our part is to build that hospital, and we're trying to bring it on-line early."

"And, of course, we'll always have a disaster response mission," Van Antwerp said. "We will be tested again. This year they're predicting five to 15 hurricanes, but I also know we're much better prepared because of what happened on the Gulf Coast."

"It's a wonderful time because there's so much going on," Van Antwerp said. "This is when it becomes important to deliver, because people are counting on us. There will be challenges and pressures, but that's exciting. I don't back off from those challenges — that's when you put your team together and you get at it."

Priorities. Everyone who has listened to Van Antwerp knows how the Corps will "get at it." He has become famous for his six priorities and three tenets.

"Anyone who hears me speak in the next year will hear these priorities and tenets, because I think they're crucial," Van Antwerp said. "What they tell you is that we're back to basics, what Vince Lombardi called 'blockin' and tacklin'. They're not in order — they're six important things that we have to do."

The priorities include:

Support the Global War on Terror and the expeditionary mission. "With so many people deployed to Iraq, Afghanistan, the Gulf Coast, and elsewhere, is there any doubt that the Corps of Engineers is an expeditionary force?" Van Antwerp asked. "So part of supporting expeditionary missions includes what we're doing to support our people — Civilians, Soldiers, and contractors — who deploy."

Enhance the quality of support of Soldiers, Civilians, Families, and the public. "Families are a priority from the Chief of Staff of the Army," Van Antwerp said. "He feels they should be the Army's next area of emphasis."

Complete transformation of the Theater Engineer Commands. "We need to get that right, and it covers a lot of ground," Van Antwerp said. "It has to do with the Reserve Components, with command and control, with what you do when you're in a theater like Iraq or Afghanistan, and with your engineer command structure."

Effectively prepare for and respond to disasters. "Notice I did not say 'efficiently,' because we must build redundancy into our disaster response," Van Antwerp said. "Our mark will be made by how quickly we get to a disaster area with the right stuff, and get the job done."



Lt. Gen. Robert L. Van Antwerp (right) dines with Soldiers and Corps Civilians during his trip to Iraq. (Photo courtesy of Gulf Region Division)

Enable Gulf Coast Recovery. "That will be our number one civil works mission," Van Antwerp said.

The final priority is **Deliver military, civil works, R&D, and regulatory programs and projects.** "That's the blue collar work that we have to deliver," he said.

Tenets. The Chief's six priorities tell us what the Corps is going to do, and his three tenets tell us how the Corps will operate as we do them.

The first tenet is **Communicate transparently**, and the Chief of Engineers has a lot to say about that.

"For example, people who live on the Gulf Coast need to know their level of risk, and it needs to be told in a way they can understand," Van Antwerp said. "I like to call that 'the truth well told.' The truth can be spoken in 'engineerese' and only an engineer can understand it. But if your mother owns a house in the Ninth Ward, she wants to know, 'Where will the water mark be on my wall?' If you can talk like that, you've taken it from a map with colors to something that people can understand."

"Another thing we did on the Gulf Coast was roll out a risk and reliability assessment on June 20," Van Antwerp added. "This is our best shot at telling people what their risk is with the project at its current state, and then we'll make a run that tells them what their risk will be when we get to the 100-year level of storm protection. Then they can make decisions. That's communicating transparently."

"And when you communicate transparently, when you have something that's due, you tell people when it's due, and you deliver on that date," Van Antwerp said. "I call that a trustworthy statement."

The second tenet is **Focus on your mission**, and it helps to know that Van Antwerp has a glass jar full of walnuts and rice that he uses as an example. If you dump it all out and put the rice grains back in first, the walnuts will never fit. But if you put the big walnuts in first, then all the little rice grains will pour in and fit around them.

"We're going to focus on our major missions (the walnuts), and all of the other little things (the rice grains) will fall in place," Van Antwerp said.

The third tenet is **Team with industry.** Van Antwerp has a lot to say about this, too, and he likes the word "team" much better than "partner."

"Teaming" is a higher level of joining together than "partnering," Van Antwerp said. "You can shoot a basket, but there are four other people on the court

blocking, passing the ball, and setting up the play that lets you take that shot. So, when you think about whether one of our projects gets done on time or not, a huge portion is up to the contractor. So they aren't just a partner at arms' length; we've got to be a team."

"And heaven help us if we're at odds with a teammate," Van Antwerp added. "I've been in the Corps when most of our relationships with contractors were adversarial. But the truth is, 300,000 contractor employees work for us. We have contractors that do some of our QA/QC (quality assurance/quality control), and other things they never did before. So what we do is truly a team effort with industry."

The priorities and tenets form the basis of how Van Antwerp will lead the Corps for the next four years, and writing them was the first thing he did.

"The very first thing I did when I took over was meet with the Corps' senior leaders, and that's where the priorities and tenets were born," Van Antwerp said. "I had a lot of time to think during the confirmation process. I had written eight priorities, so that tells you where I started. And I came out of the meeting with six much-better-written priorities with the right verbs that described what we're going to do and the way we're going to do it. Plus the three tenets. It was a great session."

Stealing and sharing. There are two other terms that mean a lot to Van Antwerp and that he has brought to the Corps of Engineers.

"There are two acronyms that I've used for a long time — SIS and SIW," he said. "SIS means 'Steal Ideas Shamelessly.' That's okay stealing. That means if somebody has a good idea, you don't have to reinvent it. You can steal it and apply it to your situation. So, are ideas and lessons-learned shared broadly? If we aren't more ready for a recovery operation because of what we went through in New Orleans, then we've missed our chance."

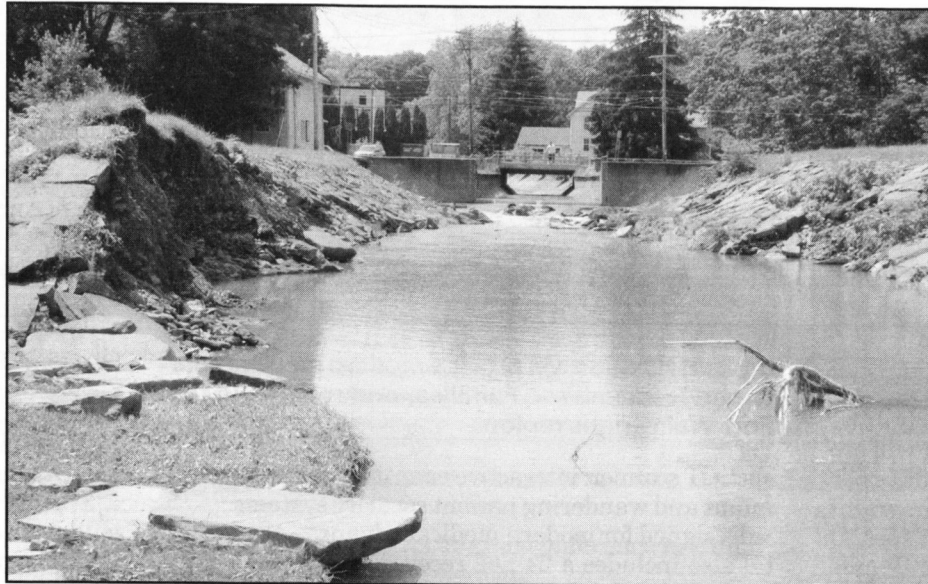
"So we have to Share Ideas Willingly — SIW is my other acronym," Van Antwerp continued. "I'm telling division commanders to e-mail a note to the other division commanders and tell them what they've learned. Significant things that happen in one place in the Corps should benefit people in other places. So we're going to do a lot of sharing and cross-talking."

Van Antwerp is also becoming famous for travel,

Continued on next page

District repairs flood damage quickly

Article by Jennifer Walsh
and Jodi Beauchamp
Photo by Jodi Beauchamp
Baltimore District



The June 2006 flooding at Newton Creek in Bainbridge, N.Y., caused substantial damage to the spoil dikes.

Levees are made of dirt and clay, but what they represent is far more important. They are symbols of strength, the last line of defense between a town and dangerously high water. When a levee fails, it leaves not only physical reminders of the damage it failed to prevent, but also emotional scars on all of those affected by the disaster.

Fortunately, Baltimore District understands the importance of maintaining flood damage reduction (FDR) projects, and is prepared for the unexpected.

In the event of a flood and subsequent damages, the U.S. Army Corps of Engineers is authorized under Public Law 84-99 to perform emergency operations such as flood-fighting and repairing FDR projects. The Rehabilitation and Inspection Program (RIP) component of PL 84-99 allows the Corps to inspect FDR projects annually to ensure that the local sponsors are maintaining the projects.

Specifically, RIP allows the Corps to repair eligible flood damages to FDR projects' pre-flood conditions.

"Our sponsors are a significant part of the program," said Larry Eastman, community planner in Planning Division. "Proper maintenance of flood damage reduction projects can be significant in terms of loss of property and public safety."

There are a number of requirements

an FDR project must meet to be eligible for rehabilitation assistance under PL 84-99. The project must be active in the RIP, properly maintained by a non-federal sponsor, and have an inspection rating of minimally acceptable.

The Baltimore District RIP Project Delivery Team (PDT) has developed business procedures for determining rehabilitation assistance that embraces the command philosophy that emergencies are *not* business as usual.

The PDT is managed by the Planning Division and consists of representatives from Construction Division field offices, the Engineering Division, Emergency Management, and repre-

sentatives from local sponsors.

Following a flood event, the PDT meets to evaluate sponsor requests and schedule field inspections. Once the field visit is accomplished, the PDT meets to determine eligibility for repair, discuss repair alternatives, costs, and environmental impacts.

The findings are documented in a Project Information Report (PIR), which is a decision document determining federal interest.

Throughout this process, the project manager coordinates with North Atlantic Division (NAD) to address any potential issues before the submission of the PIR to NAD for approval. This step has led to a better product and

kept NAD closely attuned to Baltimore's process.

These business processes have resulted in faster response times to get boots on the ground, project evaluation of eligible damages, and requests for funding. Standardized training, documentation, and coordination ensure that each PDT member knows their role and the processes are streamlined to be more responsive to those in need.

"North Atlantic Division appreciates Baltimore District's timeliness with producing concise and well organized decision documents, such as the Project Information Reports, which streamlines the process of responding to disaster incidents through Public Law 84-99 and the ER 500-1-1 guidance," said John Beldin-Quinones, NAD Civil Disaster program manager. "Baltimore's Emergency Management staff and the PL 84-99 project manager have been realistic, relevant, and conscientious in reporting and using available funding to get the job done"

During 2006, there were two major flood events that provided an opportunity for Baltimore District to demonstrate its unique approach to emergency situations. Of the 18 requests from both events, seven were deemed eligible for repair under the RIP, and a PIR was prepared. The PDT completed five PIRs (still waiting for funding for two PIR's) at a cost of about \$80,000 within three weeks of each request that resulted in the approval of about \$2.5 million for construction.

Continued on page eight

New Chief



"It's a time when we'll have to deliver, because I think we have an issue with trust. But I think we can build back that trust, and we will. We'll build it back by executing and delivering...say what you're going to do, and do what you say." (Photo by F.T. Eyre, HECSA)

Continued from previous page

and has logged a lot of air-miles, most recently to Iraq.

"I think you'll find that my travels align with our priorities," Van Antwerp said. "For example, 'Enable Gulf Coast recovery' is one priority, so that was my first stop. And I needed to go to Iraq, because that's a priority. I wanted to meet Gen. David Petraeus and other leaders there and say, 'Tell me how our support is doing.'"

"And I'm meeting people and gauging how they feel," Van Antwerp said. "How are they? Are they tired? Are they energized? You can't do that by phone; you can't do that by VTC. You've got to go and hang with them."

"Another part of my traveling is strategic communications," Van Antwerp added. "I have a big role in strategic communications. I had a media event on the Gulf Coast, and I'll do that wherever I go."

Iraq trip. The Chief of Engineers had three things he wanted to accomplish in Iraq.

"The first thing that we assessed was our support of the theater command," he said. "That's a question that I've been asking the staff, and I wanted to talk to Gen. Petraeus about that. He needs engineer planning support on his theater staff to develop future plans for the theater. Probably one of those plans is an eventual exit plan. So, if at some point we begin to draw into fewer bases, and begin drawing down those bases, we've got to help plan it. So I want to make sure Gen. Petraeus has the proper engineer planning on his staff to look to the future."

"The second assessment was at the Brigade Combat Team," Van Antwerp said. "Do we have the right engineer support for the Soldiers and units on the ground?"

"Then the third part was GRD itself," Van Antwerp said. "I think we're at a transition point. Just like we want to hand sectors over to the Iraqi soldiers and police force, we've got to turn this big animal called infrastructure over to the Iraqis. Do they have the people to design, to plan, to manage a project, to do QA/QC? Can they run the whole thing? Or how much longer do we need to work with them as we transition? Just as you need an exit strategy there for soldiering, I think you need an exit strategy for our infrastructure business."

Bottom line. The bottom line for the new Chief of Engineers is that he is pleased with what he has seen in his first weeks with USACE, but knows that we face many challenges.

"I have a good first impression of the Corps," Van Antwerp said. "If I were to rank us on a good-to-great scale, I'd say we're good to very good. But I know we can go to great, so that's the next step."

"Here's a gut feeling that I have," he concluded. "We have lots of lists of things to do; we have a lot of new business practices. But we need to focus our efforts. When we were kids, you could take a magnifying glass, focus sunlight, and start a fire with a pile of leaves. That's focused light. Whenever you can focus something, it's much more powerful. So part of what we have to do in the Corps is focus our efforts. The best way to regain the trust and confidence of the American people is to deliver."

Fort Wainwright gets modern hospital

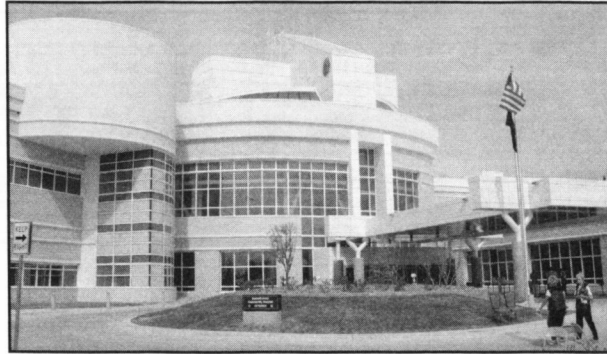
Article by Pat Richardson
Photo by Tom Findtner
Alaska District

The dedication ceremony of Bassett Army Community Hospital at Fort Wainwright, Alaska, marked the end of construction and the beginning of medical services in a modern \$215 million facility near Fairbanks. Alaska District, in support of the U.S. Army Health Facility Planning Agency, built the new 259,500 square foot medical building to replace a hospital built in the 1950s before Alaska became a state.

Medical services phased the move into the new facility throughout June with the goal of all services operating in the replacement hospital by early July.

The only Army hospital in Alaska, Bassett will provide state-of-the-art medical care to active-duty personnel and family members from Fort Wainwright, Eielson Air Force Base, and local military retirees, an estimated 25,000 patients in a 46,400 square mile area.

Built to withstand a major earthquake and be self-sufficient for a short time, the new facility includes 22 medical/surgical beds; 10 labor, delivery, postpartum, and recovery beds; four operating rooms, a 40-



Bassett Hospital will provide modern medical care to servicemembers, Families, and retirees in the Fort Wainwright region.

slice CT scanner; interactive education television, and infant and wandering patient security systems.

Designed for modern medical advances, the hospital also includes a 24-bed recovery ward to support same-day surgery.

The building design reflects today's health care philosophy by providing a wellness facility. It is designed to encourage patient, visitor, and staff interaction and

to involve patients in their own health care.

The project's architectural-engineering firm was HKS Inc./Wingler & Sharp of Dallas and Wichita Falls, Texas. Alaskan consultants on the project were HMS Estimating, Arctic Slope Consulting Group, DOWL Engineers, and Land Design North. The Corps' construction contractor was a joint venture of Dick Pacific of Anchorage and GHEMM Co. of Fairbanks.

The design attracts people inside with a central drum that reaches the height of the three-story building. The drum contains a bright "village green."

The first floor focuses on out-patient care and includes specialty clinics and customer support services such as the dining facility.

The second floor focuses on in-patient care but also includes a resource center where patients can use Internet to access e-mail and health care Web sites.

The third floor is for administrative staff and includes a conference center with classrooms and an auditorium for patient and staff education.

The building also includes a chapel.

The hospital design includes many features for the climate of Fairbanks where temperatures range from minus 60 degrees in winter to 85 degrees in summer.

IM/IT changes begin one-year phase-in

By Peggy Wright

Army Corps of Engineers Information Technology (ACE-IT) a Letter of Obligation, the binding document under which ACE-IT will operate, on April 19. We received our Notice To Proceed on May 15, which started the one-year phase-in.

During the first six months of phase-in, ACE-IT will complete the preparations and activities to allow us to assume full responsibility for the IM/IT support described in the Performance Work Statement (PWS).

Activities during this period require participation by each district, division, laboratory, and center. These activities are required by the PWS, and the schedule and manner in which they will be conducted are integral parts of the ACE-IT proposal.

The two major activities to be completed in the first six months are the Wall-to-Wall Inventory (W2W) and the Baseline Assessment. Though conducted independently, the W2W will precede the general schedule of the Baseline Assessment. Accurate and complete site information, as well as active site participation, is the key to the success of the operational transition.

ACE-IT will assume full operations for each site's IM/IT workload during Nov. 15 to May 14.

Wall-to-Wall Inventory

The W2W schedule is posted on ACE-IT Online <https://ace-it.usace.army.mil> under "Schedule." (A W2W pilot was completed at New England District June 21.) The W2W is conducted by contractors and will identify and tag all IM/IT assets, except for equipment maintained by included sites.

Each site with 15 or more employees will be visited, and each site must assure that access is afforded to the ACE-IT contract staff inventorying the equipment. Due to the critical nature of this work and the short time to inventory and determine refresh needs, there will be as many as 10 teams working the W2W.

For sites with fewer than 15 employees, a standard form will be provided to collect the inventory. (If exceptions to the "rule of 15" are needed because of site IM/IT complexity or equipment value, please contact the ACE-IT Liaison Representative listed below.)

The asset inventory will provide a baseline for Corps' IM/IT equipment. Equipment lists provided in the PWS were collected in FY03, so an updated list is critical to determine equipment requirements.

IM/IT equipment includes any device hooked to the network (routers, switches, computers, hubs), cam-

eras, cell phones, PDAs, copiers, faxes, VTC equipment, etc. The inventory data will be used to determine locations and equipment requirements; this information will determine equipment to be refreshed.

At the Regional Information Officer Symposium, we emphasized the importance of disposing of excess unused and outdated equipment. Disposing of this equipment before the refresh not only reduces the effort to inventory the equipment, but also eliminates any confusion about which equipment needs to be refreshed.

Baseline Assessment

While the W2W is designed to identify and baseline all IM/IT equipment, the Baseline Assessment is designed to identify and baseline each included site's IM/IT workload and service level requirements.

Since about five years has passed since the initial workload data was collected, it is essential that the IM/IT workload be captured. "If it's not reported, we can't support it!" is our mantra, because many of the functions and most of the workload levels have changed in the last four-to-five years. **Current levels must be identified to provide proper support.**

HR Corner

ULC offers top training

The USACE Learning Center (ULC) operates the Proponent Sponsored Engineer Corps Training Program (PROSPECT) in support of the U.S. Army Corps of Engineers, the Army, and federal and state agencies by providing high-quality training and learning for employees in USACE and Army-support missions.

The ULC administrative offices are in Huntsville, Ala., but PROSPECT courses are conducted in Huntsville and locations around the world to meet the needs of Corps employees and other government personnel.

The PROSPECT Program provides job-related training through a variety of technical courses. About 500 Corps volunteers who are subject matter experts teach courses in their fields. Instructors also come from universities and private industry.

The ULC has aligned the 200-plus PROSPECT courses with the USACE Communities of Practice (CoPs). The ULC has three divisions: Engineering and Construction, Plans and Operations, and the Pro-

gram Management Office (PMO). Additionally, much of the initial workload in the PWS was identified as "Cost Reimbursable (CR)" work since it could not be quantified. (Two examples are local Web page development and specialized visual information projects.) All unique site IM/IT requirements were also included as CR and must be described so they may be supported when transition occurs in the second six months.

Another function of the Baseline Assessment is to capture service level agreements (SLA). For example, the PWS called for a standard minimal return to service (for desktops) of 48 hours. This standard may not be acceptable for many users, so current service levels need to be identified so that ACE-IT can propose and price new SLAs that are in line with current service levels.

The contact for the W2W inventory and Baseline Assessment is Teresa Russell-Sabens. She will ensure that the schedule is coordinated and provide ACE-IT with site contacts to prevent delays and assure access to IM/IT equipment. She may be reached at teresa.e.sabens@us.army.mil or 251-690-3331.

(Peggy Wright is the Director of the Army Corps of Engineers Information Technology.)

gram Management Office (PMO).

The first two divisions provide academic and training support to all the Corps CoPs and sub-CoPs. Each CoP has a representative or course manager at the ULC to ensure PROSPECT courses meet the CoP's needs. The PMO provides logistic support to the ULC.

The Registrar's Office provides a central registration service by enrolling students, maintaining student records and transcripts, and collecting tuition. Registrar personnel allocate and manage quotas for the PROSPECT programs and manage all DoD schools and non-Corps programs through the Army Training Requirements and Resources System.

Discussion with your supervisor can help determine if you have a training need that can be met by the ULC. Contact the registrars, Sherry Whitaker, 256-895-7425, or Bobbi Stoddard, 256-895-7421 for assistance. You may find the FY08 PROSPECT Program at <http://ulc.usace.army.mil>

Around the Corps

Fort Hamilton

What started as the prototype project for the National Indefinite Delivery/Indefinite Quantity (IDIQ) contract for building demolition is finished. The project at Fort Hamilton, N.Y., project had two buildings and one utility room that needed to come down. The two larger buildings totaled 103,348 square feet.

"We used a Northeast Region (NERO) IDIQ award for Fort Hamilton," said Michael Norton, the Facilities Reduction Program manager at the Engineering & Support Center, Huntsville. "When that first year ended, we converted it from one region to four regions, making it a National IDIQ."

"The original cost estimate to demolish the two buildings was \$3.2 million," Norton said. "We found a contractor who can do it for \$1.5 million, including the asbestos abatement. That's half the cost to the customer."

The project, which started April 30, was completed June 28. Huntsville Center is working with New York District, Fort Hamilton, and Charter Environmental Inc. to bring down the buildings by traditional demolition.

The Army requires that at least 50 percent of construction and demolition debris by weight be recycled, and the contractor estimates that 95 percent of the debris is reusable. The area was restored as a grass field by the end of June.

Legend

A New England District employee recently received a national honor for his work in recreation. Keith Beecher, park manager at East Brimfield Lake/Westville Lake/Conant Brook Dam, received the 2007 American Recreation Coalition's 2007 Legends Award.

The award is presented annually to an outstanding federal employee from each recreation-related federal agency for his or her contributions to enhancing outdoor recreation resources, facilities, and experiences on public lands.

Beecher was selected for exceptional work during his 22 years of service at the Cape Cod Canal, the Naugatuck, and the Thames River Basins. He has been instrumental in developing volunteer programs and partnerships at Buffumville Lake. As a park manager, Beecher has worked hard to build relationships with community leaders that resulted in designating a National Recreation Trail at Westville Lake that joins recreational trails from Sturbridge and Southbridge, Mass.

Beecher received his honor at the Recreation Exchange Luncheon on June 12 in Washington, D.C.



Fire trucks lined up in front of the new Federal Fire Station at Schofield Barracks, Hawaii.

New fire station

A new Federal Fire Station Friday has been built at Schofield Barracks, Hawaii.

The original Station #15 on Schofield traces its roots back to 1924. The new Federal Fire Department Station #15 was built by Niking Corporation for \$5.1 million and is fully operational.

At nearly 10,000 square feet, the facility includes

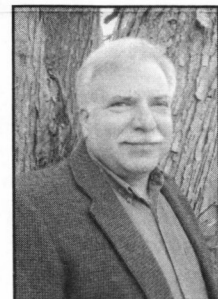
staff offices, a training room, a large kitchen, laundry, 11 on-site rooms for on-duty firefighters, a command and control center, an Emergency Medical Service, plus a multi-purpose dayroom. In addition, the facility will also be equipped with a state-of-the-art mobile decontamination station capable of decontaminating up to 700 people per hour.

The Federal Fire Department Hawaii provides fire protection and emergency medical services to 69,188 acres of military installations and facilities. The consolidation of the Navy, Marine Corps, and Army fire departments covers 22.2 percent of Oahu's 380,000 acres. The department consists of 245 trained civilian personnel, 13 fire stations, 28 firefighting apparatus, and 13 specialized response vehicles.

SAME awards

On May 2, during its annual conference in Philadelphia, the Society of American Military Engineers (SAME) recognized two Norfolk District professionals for engineering and architectural contributions and accomplishments.

William Sorrentino, Jr. received the Lt. Gen. Raymond A. Wheeler Medal for Leadership in Military Engineering. Sorrentino, the Chief of Engineering, Construction & Operations, was nominated for his leadership, professionalism, and innovation in a host of areas, especially his work in streamlining the district's critical business processes, and his contributions in enabling the district to better leverage its customers' dollars.



Terry Deglandon.

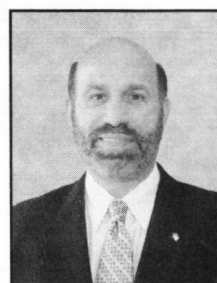
creating a stable sense of place for our military, their supporting staff, and families."

Small Business Specialist of the Year

Hubert Carter Jr. of Omaha District has received the 2006 Department of Army Small Business Specialist of the Year Award given by DA's Office of Small Business Programs. The award was presented during the 3rd Annual National Veteran Small Business Conference in Las Vegas on June 28.

Carter has developed and implemented several process improvement strategies that resulted in a stronger, more effective small business program at his district. One of his accomplishments was implementing a strategy that gave Service Disabled Veteran-Owned Small Businesses Priority One for small business set-asides. This strategy resulted in Omaha District achieving the highest Service Disabled Veteran-Owned Small Business contract award percentage in USACE of 11.78 percent.

"As I cannot achieve anything by myself, I sincerely believe that small business, like all missions and programs execution, is an A-Team activity – top down, left to right," said Carter. "The true recognition of achievement belongs to Team Omaha, USACE, Department of the Army, and each of you for providing the leadership, creating the environment, and providing the opportunity for a country boy like me to play on such great teams."



William Sorrentino, Jr.



Students in the Engineering and Construction camp get hands-on experience with concrete.

Not just another summer camp

The 5th Annual Society of American Military Engineers/Army Engineering and Construction Camp was held June 10–16 in Vicksburg, Miss. The camp lets high school students experience engineering through hands-on activities in engineering, leadership, communication, flexibility, and team building.

The activities are performed under the supervision and guidance of Society of American Military Engineers (SAME) Post members.

Forty students from communities throughout the nation resided at the Morris Army Reserve Center, home of the 412th Engineers Command.

The camp hosted a vigorous schedule filled with challenging activities. The engineering field has many different disciplines, and a goal of the camp is to introduce students to as many as possible, from river engineering to structural analysis and design, from wetlands delineation to soils engineering.

One activity was a concrete exercise where the students worked in an ERDC lab to mix and cast some concrete for the "strongest concrete" competition.

The campers also spent an afternoon aboard the Corps' Motor Vessel *Benyaard*. They learned about the importance of the Mississippi River as a major transportation route, and the fuel, commodities, and other materials transported along the river.

Before boarding the *Benyaard*, students spent the morning at the mat casting field in Delta, La., making articulated concrete mats, which is one form of bank stabilization used on the Mississippi River.

On the *Benyaard* students saw how the mats are used, and learned how dikes and revetments are built along the riverbanks to maintain channel alignment.

"How many people can say they piloted a towboat pushing a barge," said Stephanie Beard, from St. Joseph's High School in Baton Rouge. "I got to turn the whole thing around in the middle of the river."

Value engineering awards

Louisville District has won two awards in the 2006 Department of Defense Value Engineering Achievement Awards competition, including an award for the MILCON Transformation (MT) Team, and a Special Award for the district.

The ceremony was held May 16 at the Pentagon.

The Outstanding Value Engineering Team Award was presented to the MILCON Transformation Team, which participated in 13 Value Engineering/Management Workshops to help the Corps transform its Military Construction Delivery Process.

Col. Raymond Midkiff, Louisville District commander, received a Special Award for the district's support and use of the VE Program. The citation said that the district doubled its combined military programs and civil works cost savings and avoidance to \$15.5 million in fiscal year 2006, while providing management, technical, and contracting support to help Headquarters transform the Corps' MILCON delivery process.

Women lead in GRD Central District

By Norris Jones
GRD Central District

It's no longer news that women work and lead in every field from mining coal to piloting the space shuttle. But it is still unusual for women to command a military operation in a war-zone.

Four of the top military and civilian leaders in Gulf Region Division's Central District (GRC) are women. They oversee one of the U.S. Army Corps of Engineers' busiest districts, responsible for nearly 400 active projects valued at more than \$1.2 billion. GRC manages the construction of essential service projects benefiting Iraqis in Baghdad and Al Anbar Provinces.

Col. Debra Lewis is the District Engineer, Derya Smith the Deputy District Program Manager, Sherry Gaylor the Chief of Contracting, and Janet Faust the Chief of Resource Management.

"We're renovating hospitals, building schools, repairing sewer lift stations, paving roads, installing new water and sewer lines, building courthouses, and putting in new electric distribution networks throughout Baghdad," Lewis said.

"In Fallujah, one of our other key cities, we're managing \$80 million in contracts to put in that community's first-ever wastewater treatment plant and collection system," Lewis continued. "Residents there are using septic tanks with raw sewage running in the streets and into the Euphrates River. We've also got \$57 million in contracts to upgrade its electrical network including new substations, more than 45,000 utility poles, and 2,400 kilometers (1,488 miles) of cable. We're building four new primary healthcare centers there each capable of providing medical care to 150 patients daily."

Apart from the ongoing work, GRC has closed out more than 500 projects valued at more than \$650 million during Lewis' year in command.

The four female leaders lead a staff of 170 U.S. military and civilian personnel, plus more than 100 Iraqis. Most of those local nationals are engineers who serve as quality assurance representatives visiting the various projects every day to ensure the contractors are providing quality construction in a safe manner.

"I volunteered because I wanted to be part of this historic undertaking," said Smith. "Those projects are having a positive impact on people's lives. Iraq is in large part an engineers' war and we're making a difference. Those Iraqis on our staff are proud to be part of this. They're building a future for their children and grandchildren. Life is all about change and learning. That's the best part of this job — interacting with some dedicated individuals from throughout the world."

Gaylor supervises 10 contract specialists and says Iraq is her most challenging assignment, but also the most rewarding. And Gaylor has a wealth of expeditionary experience to compare it with. This is her *eleventh* deploy-



Four of the top military and civilian leaders in GRD's Central District are women. From left are Derya Smith, Sherry Gaylor, Janet Faust, and Col. Debra Lewis. (Photo courtesy of Central District)

ment, including tours in Afghanistan, Kosovo, Macedonia, and Bosnia.

One of Gaylor's priorities is customer service ensuring all contracting actions have been thoroughly coordinated with all interested parties including the U.S. military, U.S. Department of State, Iraqi Ministries, local Iraqi city officials, and the contractors themselves. To encourage more local participation in the bidding process, Gaylor and her staff have hosted one-day workshops in Ramadi, Fallujah, Mahmudiyah, and Baghdad to explain to Iraqi construction firms what a "winning proposal" is all about, including the steps involved from the Statement of Work and Advertisement, to the receiving of proposals and awarding the contract.

Despite her demanding job, Gaylor always greets people with a smile and

upbeat attitude.

Faust says one of her most important responsibilities is ensuring the Iraqi contractors get paid. She and her staff of six professionals are also involved in finance, accounting, and budget activities including workload analysis, project closeouts, manning document reconciliations, fund type process issues (there are more than 20 different funding codes), contracting and program management issues.

"I'll remember my time in Iraq as a two-year educational journey working alongside some exceptional team members," Faust said. "You can't learn in 10 years in a stateside district what you learn here in one year," she added. "Our mission here is an awesome challenge. We work alongside Iraqis everyday on a noble mission of improving their infrastructure."

Lewis is the first female district engineer that USACE has assigned to a war-zone command. But it is not her *first* first...she was also in the first class of women to graduate from the U.S. Military Academy at West Point.

Her female colleagues at GRC had high praise for her leadership. They say she is one of the most hard-working individuals they've ever met, handles her responsibilities with grace, and ensures that everyone throughout her command is treated with dignity and respect.

"It's an honor to serve as GRC's commander," Lewis said. "I feel blessed to be working directly with the people of Iraq. I've seen many examples where there is clear initiative, high standards, and a sincere desire to take responsibility for getting things done."

"The Iraqis working as a part of our GRC team, and those I meet throughout Baghdad and Al Anbar Provinces, are inspiring and possess great courage, as do the many people from around the world who are here to help the Iraqis build a better future," Lewis continued. "While the only thing constant here seems to be change, one thing that does *not* change is that getting things done is 90-95 percent interpersonal relationships and communication, with the remainder being the content or technical skills we bring to the table."

(Note — Janet Faust deployed from Baltimore District, Sherry Gaylor from Wilmington District, Col. Lewis was District Engineer at Seattle District, and Derya Smith was the Program Manager for the U.S. Army Contingency Construction Program at the Assistant Chief of Staff for Installation Management in the Pentagon.)

Flood damage repair

Continued from page five

"The consistency that the Planning Division has established for the program is incredible," said Maria de la Torre, chief of the Emergency Management Branch. "From the office to the field, it's an overall effort."

The expedited approach to emergency repairs was demonstrated by the district's performance during the flooding events in 2006. In Bainbridge, N.Y., a channel project with levees was damaged by a major storm in June. Damages included a cut into the levee and erosion along the toe of the levee, displaced riprap, and an exposed utility that was in danger of failure. Farther upstream, a Section 14 project to stabilize the shoreline was under construction.

By communicating with the Section 14 project team, the RIP PDT coordinated a joint project leveraging an existing contract and personnel. Baltimore District restored the Bainbridge FDR project to pre-flood conditions in less than three months, just in time to protect the community from the November storms.

"From an engineering standpoint, it's rewarding when local sponsors have



Remedial repairs to the Bainbridge levee included regrading the slopes and placing riprap for protection. Although there was much damage, Baltimore District repaired it to pre-flood condition in less than three months.

problems due to flooding and we can step in and help them get the projects back on track," said Snyder.

The PDT works to ensure that sound engineering principle coupled with an expedited process leads to ensuring

Baltimore District's levees function as designed.

"The success of this program is based on a standardized approach and the collective efforts of our sponsors and our team members," said Eastman.